



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,084	03/29/2001	Christian R. Thomas	42390P10460	7001

8791 7590 11/12/2004

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

GARG, YOGESH C

ART UNIT PAPER NUMBER

3625

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/823,084

Applicant(s)

THOMAS ET AL.

Examiner

Yogesh C Garg

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The applicant's amendment received on August 5, 2004 is acknowledged and entered. The applicant has amended claims 1-8 and 11-18 and added a new claim 21. Currently claims 1-21 are pending for examination.

***Response to Arguments***

2.1. Applicant's arguments, see Remarks page 6, filed on August 5, 2005, with respect to rejection of claims 1-12 under 35 USC 112, second paragraph, have been fully considered and are persuasive in view of the amendments made to claims 1 and 6. The rejection of claims 1-12 under 35 USC 112, second paragraph has been withdrawn.

2.2. Applicant's arguments, see Remarks pages 6-9 with respect to rejection of claims 1-20 under 35 USC 102 (e) as being anticipated by Graham have been considered but are not persuasive. The applicant argues that since Graham teaches that the protocol of the requestor client and the service provider are unimportant and that a client may have a protocol either same or different from the service provider (see Graham, col.6, lines 13-18) does not teach the recited limitation in the amended claims 1-21, that is the communication proxy by which a client accesses a web server to receive Internet service is required to be compatible with a client environment and therefore teaches away from the client's invention. The examiner respectfully disagrees for following reasons:

In response to applicant's argument that Graham teaches that the protocol of the requestor client and the service provider are unimportant and that a client may have a protocol either same or different from the service provider (see Graham, col.6, lines 13-

Art Unit: 3625

18), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

The reference Graham teaches that the communication proxy by which a client accesses a web server to receive Internet service is required to be compatible with a client environment (see at least col.6, line 66-col.6, line 12, "*Clients 410, 412 and 416 may request a service using their own unique client protocol. However, as the advertisements for the services are stored in a canonical representation within internal registry 402, protocol adapter servlets are required for conversion of the client protocol to the canonical representation. Client protocol adapter servlets 404, which function similarly to the service provider protocol adapter servlets 406, are componentized mechanisms based on servlets, that listen for client lookup requests. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each protocol. Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request.*"). The adaptor servlet, which provides a canonical representation, such as XML or SGML format, corresponds to the communication proxy and is compatible with the client environment because it enables the client to request a service using the client's protocol from a service provider.

Sine the rejection of claims are on the basis of anticipation, under 35 USC. 102 (e) the argument that Graham reference teaches away is not relevant because the rationale of teaching away is applicable for obviousness type of rejections.

In view of the foregoing, the rejection of independent claims 1, 6, 13 and 17 and hence their dependencies, 2-5 & 21, 7-12, 14-16 and 18-20 under 35 USC 102 (e) as being anticipated by Graham is sustainable.

This is a Final Rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by  
Graham.

Regarding claim 1, Graham discloses a method comprising:

registering an Internet service with a broker (see at least col.6, lines 1-49, "*FIG. 4 is a conceptual diagram of a universal service broker interchange mechanism (USBIM), depicting interaction between the functional elements needed for brokering an interface between a service provider and a client needing service. In diagram 400, clients 410, 412 and 416 represent clients requiring a service. .... In accordance with the present invention, internal registry 402 is an internal registry providing rapid in-memory access to a database of service registrations.* ..... "). Note: Graham discloses that Internet services are registered with the USBIM, which corresponds to a broker.);

transmitting metadata, to the broker, describing at least one communication proxy, including at least one supported protocols, a type, and a location of the communication proxy (see at least col.6, lines 1-49, "*FIG. 4 is a conceptual diagram of a universal service broker interchange mechanism (USBIM), .... The preferred embodiment of these service registrations utilizes Extensible Markup Language (XML) documents. .... In the present invention, service providers 420, 422 and 424 advertise services in the same manner as those of prior art; however, .... internal registry adapter servlets intercept the advertisement. ...*

Art Unit: 3625

*Each protocol is associated with a different servlet that understands the details of the service advertising mechanism unique to that protocol. The unique protocol of the service provider is converted to a canonical representation of the service provider advertisement. ....Each time a new service provider advertises a new service or updated service, service provider protocol adapter servlets 406 convert the service provider's unique protocol into a canonical representation and update internal registry 402 with the new service information. At any one time, internal registry 402 contains an index of canonical representations of service advertisements from service providers 420, 422 and 424. "* Note: The information received from the service providers corresponds to transmitting metadata to broker and includes the type of communication proxy, that is adaptor servlet required to convert the service provider's protocol to a canonical representation, e.g. XML or SGML. Also see col.6 line 50-col.9, line 30); and

accessing, by the communication proxy, a web server to provide the Internet service to a client if the communication proxy is compatible with the client requirement (see at least col.6, line 66-col.7, line 38, "*Clients 410, 412 and 416 may request a service using their own unique client protocol. However, as the advertisements for the services are stored in a canonical representation within internal registry 402, protocol adapter servlets are required for conversion of the client protocol to the canonical representation. Client protocol adapter servlets 404, which function similarly to the service provider protocol adapter servlets 406, are componentized mechanisms based on servlets, that listen for client lookup requests. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each protocol. Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request. In addition, client protocol adapter servlets 404 also search internal registry 402 for the requested service advertisement in the index of service provider advertisements, and respond back to the requesting client with the results of the search using the client's request protocol.... "* Note: The adaptor servlet, which corresponds to the communication proxy, is compatible with the

client environment and enables the client to request a service using the client's protocol from a service provider.

Regarding claim 2, Graham discloses a method as disclosed in claim 1. Graham further suggests downloading the communication proxy from the location to a node local to the client (see Fig.4 where client protocol adapter servlet 404 provides/downloads XML format, a canonical representation at a local node. It is already analyzed and discussed in claim 1 above that the adaptor servlet transforming the protocols to canonical representation, for example in XML format corresponds to a communication proxy, where it, **on behalf of the client**, handles the details of client lookup for each protocol ( client specifies the protocol it supports, see the example of printer service) searches internal registry 402 for the requested service in the registry and responds back to the client with the results of search using the client's request protocol. See also col.7, lines 32-38, *"..... In effect, the client protocol adapter servlet brokers an interchange mechanism between the requester client and the service provider. In the case of brokering a UpnP-based service to a Jini client, this is accomplished by providing a Java interface and implementation based on the Service:Name: protocol associated with the service provider to the requesting client.* ". Note: The, adapter servlet, which is the communication proxy provides the interface to establish communication between the client and the service provider and the adaptor servlets are downloaded to the client location from 402, the internal registry4, see FIG.4).

Regarding claim 3, Graham further discloses that in claim 1, the type of communication proxy is one of Java, common language runtime (CLR),

Art Unit: 3625

component object model (COM), and Win32 binaries (see at least col.5, lines 38-52, and col.7, lines 20-32 and lines 49-58, wherein Graham discloses use of Java interface and component object model. The limitation in claim is directed to any one choice out of Java, common language runtime (CLR), component object model (COM), and Win32 binaries and Graham at least discloses use of two of them, thereby anticipating the claimed limitation. Also see col.6, lines 1-11, " ..... In diagram 400, clients 410, 412 and 416 represent clients requiring a service. As discussed above, if a service provider is available for the needed service, such as one of service providers 420, 422 and 424, and the protocol is compatible with the requester client, a service discovery protocol may be used for establishing collaboration between the client and the service provider. ", and col.7, lines 32-38, "..... In effect, the client protocol adapter servlet brokers an interchange mechanism between the requester client and the service provider. In the case of brokering a UpnP-based service to a Jini client, this is accomplished by providing a Java interface and implementation based on the Service:Name: protocol associated with the service provider to the requesting client ".).

Regarding claim 4, Graham further suggests that the method in claim 1, wherein the at least one supported protocol of the communication proxy includes at least one of hypertext transfer protocol (HTTP), simple mail transfer protocol (SMTP), simple object access protocol (SOAP), secure sockets layer (SSL/HTTPS), and secure HTTP (S-HUP) (see at least col. 6, lines 19-27, 50-65, col.7, line 50-col.8, line 5, which disclose use of XML and SOAP , is a lightweight protocol for exchange of information based on XML, hence use of SOAP is inherent with the use of XML based services. Also see col.6, lines 1-11, " ..... In diagram 400, clients 410, 412 and 416 represent clients requiring a service. As discussed above, if a service provider is available for the needed service, such as one of service providers 420, 422 and 424, and the protocol is compatible with the requester client, a service



*discovery protocol may be used for establishing collaboration between the client and the service provider.   ").*

Regarding claim 5, the limitations are already covered by claims 1 and 4 and therefore analyzed and rejected on the same basis. See also col.7, lines 32-38, "*..... In effect, the client protocol adapter servlet brokers an interchange mechanism between the requester client and the service provider. In the case of brokering a UpnP-based service to a Jini client, this is accomplished by providing a Java interface and implementation based on the Service:Name: protocol associated with the service provider to the requesting client.   ".*

Note: The fact that the adapter servlet [which corresponds to the communication proxy provided to the Jini client] is able to broker an interchange between the requestor client and the service provider will inherently mean that the adaptor servlet is compatible with the Jini client and is the communication proxy as required/specified by the Jini client to be able to receive the internet services from the service provider.

Regarding claims 6-8 and 10-12, their limitations are closely parallel to the limitations recited in claims 1-5 and are therefore, analyzed and rejected similarly based on same rationale. As regards interacting with a web server using the downloaded communication proxy to receive the desired Internet service, see at least col.6, line 1- col.9, line 40.

Regarding claim 9, Graham discloses that the method as in claim 6, wherein interacting comprises: dynamic interacting (see at least col.9, lines 17-30, which discloses that even though the client and the requested service on the service provider

may be running at different protocols the information is exchanged between the two dynamically).

Regarding claims 13-20, their limitations are already covered in the claims 1-12 above and are therefore analyzed and rejected based on same rationale as being anticipated by Graham.

Regarding claim 21, the limitations already covered in claim 5 above, therefore analyzed, and rejected based on same rationale.

#### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3625

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C Garg whose telephone number is 703-306-0252. The examiner can normally be reached on M-F(8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yogesh C Garg  
Primary Examiner  
Art Unit 3625

YCG  
November 7, 2004